(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
7 July 2005 (07.07.2005)

PCT

(10) International Publication Number
WO 2005/062412 A2

(51) International Patent Classification[7]: H01M 8/10, 8/04, 4/86, 4/88, 4/92

(21) International Application Number: PCT/JP2004/019292

(22) International Filing Date: 16 December 2004 (16.12.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2003-427035 24 December 2003 (24.12.2003) JP

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(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,

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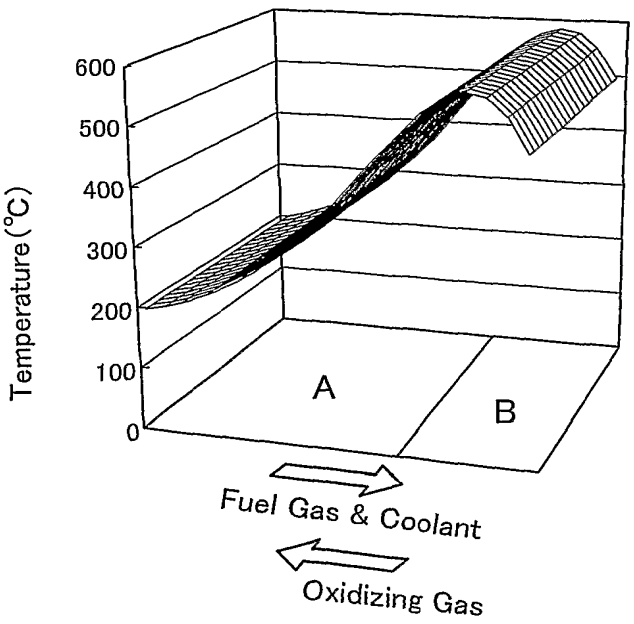
(54) Title: FUEL CELL



(57) Abstract: A fuel cell of the invention has a hydrogen permeable metal layer, which is formed on a plane of an electrolyte layer that has proton conductivity and includes a hydrogen permeable metal. The fuel cell includes a higher temperature zone and a lower temperature zone that has a lower temperature than the higher temperature zone. The hydrogen permeable metal layer includes a lower temperature area A corresponding to the lower temperature zone and a higher temperature area B corresponding to the higher temperature zone. The lower temperature area A and the higher temperature area B have different settings of composition and/or layout of components. This arrangement effectively prevents potential deterioration of cell performance due to an uneven distribution of internal temperature of the fuel cell including the hydrogen permeable metal layer.

WO 2005/062412 A2

SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *without international search report and to be republished upon receipt of that report*

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